C4 229. (New) The composition of claim 224, which comprises a pharmaceutically acceptable carrier.

In The Specification:

Please replace the paragraph beginning on page 47, line 8 with the following paragraph:

In some embodiments, it may be desirable to combine the class I peptide components with components that induce or facilitate neutralizing antibody and or helper T cell responses to the target antigen of interest. A preferred embodiment of such a composition comprises class I and class II epitopes in accordance with the invention. An alternative embodiment of such a composition comprises a class I and/or class II epitope in accordance with the invention, along with a PADRE® (Epimmune, San Diego, CA) molecule (described , for example, in U.S. Patent Number 5,736,142).

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Please replace the paragraph beginning on page 50, line 1 with the following paragraph:

The use of multi-epitope minigenes is described below and in, e.g., co-pending application U.S.S.N. 09/311,784; Ishioka *et al., J. Immunol. 162*:3915-3925 (1999); An, L. and Whitton, J.L., *J. Virol. 71*:2292 (1997); Thomson, S.A. *et al., J. Immunol. 157*:822 (1996); Whitton, J.L. *et al., J. Virol. 67*:348 (1993); Hanke, R. *et al., Vaccine 16*:426 (1998). For example, a multi-epitope DNA plasmid encoding supermotif- and/or motif-bearing PSA, PSM, PAP, and hK2 epitopes derived from multiple regions of one

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or more of the prostate cancer-associated antigens, the PADRE® universal helper T cell epitope (or multiple HTL epitopes from PSA, PSM, PAP, and hK2), and an endoplasmic reticulum-translocating signal sequence can be engineered. A vaccine may also comprise epitopes that are derived from other TAAs.

Please replace the paragraph beginning on page 51, line 29 with the following paragraph:

In some embodiments, a bi-cistronic expression vector which allows production of both the minigene-encoded epitopes and a second protein (included to enhance or decrease immunogenicity) can be used. Examples of proteins or polypeptides that could beneficially enhance the immune response if co-expressed include cytokines (*e.g.*, IL-2, IL-12, GM-CSF), cytokine-inducing molecules (*e.g.*, LeIF), costimulatory molecules, or for HTL responses, pan-DR binding proteins (PADRE®, Epimmune, San Diego, CA). Helper (HTL) epitopes can be joined to intracellular targeting signals and expressed separately from expressed CTL epitopes; this allows direction of the HTL epitopes to a cell compartment different than that of the CTL epitopes. If required, this could facilitate more efficient entry of HTL epitopes into the HLA class II pathway, thereby improving HTL induction. In contrast to HTL or CTL induction, specifically decreasing the immune response by co-expression of immunosuppressive molecules (*e.g.*, TGF-β) may be beneficial in certain diseases.

Please replace the paragraph beginning on page 54, line 26 with the following paragraph:

Alternatively, it is possible to prepare synthetic peptides capable of stimulating T helper lymphocytes, in a loosely HLA-restricted fashion, using amino acid sequences not found in nature (*see, e.g.*, PCT publication WO 95/07707). These synthetic compounds called Pan-DR-binding epitopes (e.g., PADRE®, Epimmune, Inc., San Diego, CA) are designed to most preferably bind most HLA-DR (human HLA class II) molecules. For instance, a pan-DR-binding epitope peptide having the formula: aKXVAAWTLKAAa, where "X" is either cyclohexylalanine, phenylalanine, or tyrosine, and "a" is either D-alanine or L-alanine, has been found to bind to most HLA-DR alleles, and to stimulate the response of T helper lymphocytes from most individuals, regardless of their HLA type. An alternative of a pan-DR binding epitope comprises all "L" natural amino acids and can be provided in the form of nucleic acids that encode the epitope.

Please replace the paragraph beginning on page 56, line 21 with the following paragraph:

The DC can be pulsed *ex vivo* with a cocktail of peptides, some of which stimulate CTL response to one or more antigens of interest, *e.g.*, prostate-associated antigens such as PSA, PSM, PAP, kallikrein, and the like. Optionally, a helper T cell peptide such as a PADRE® family molecule, can be included to facilitate the CTL response.